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(54) Title: REAGENT AND METHOD FOR DETECTING A CRYPTOSPORIDIUM PARVUM SPOROZOITE ANTIGEN

(57) Abstract

A reagent and method for the specific and highly sensitive detection of *C. parvum* in which the reagent is an antibody for a soluble *C. parvum* sporozoite antigen and the method is an immunoassay in which the antibody is used to detect or quantify *C. parvum* sporozoite antigen in a sample. The sample is treated to cause excystation of *C. parvum* oocysts, thereby releasing a *C. parvum* sporozoite antigen, and combined with antibodies specific for the sporozoite antigen under conditions to form an antibody-antigen complex. Detection of the complex indicates the presence of *C. parvum* in the sample. The assay allows recognition and detection of *C. parvum* in turbid samples, and due to a lack of crossreactivity with other *Cryptosporidium* species, is specific for *C. parvum* contamination or infection. The assay is highly sensitive, allowing for the detection of less than 100 oocysts per milliliter of sample.

